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EXAMINER

HOLLIDAY, JAIME MICHELE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/694,879	Applicant(s) ZILLIACUS ET AL.	
	Examiner Jaime M. Holliday	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-39 is/are rejected.
- 7) ☒ Claim(s) 12, 14, 16, 17, 22, 30, 31 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/29/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on November 25, 2003 and May 19, 2006 have been considered by the Examiner and made of record in the application file.

Claim Objections

2. **Claims 12, 14, 17, 22, 30, 31 and 39** are objected to because of the following informalities:

a) On line 3 of claim 12, replace the punctuation after --comprising-- ";" with --:--,
to correct a typographical error;

b) On line 2 of claim 14, insert proper punctuation --.-- after --network-- ;

c) On line 3 of claim 17, insert proper punctuation --)-- after --k--;

d) Claim 22 has two instances of limitations labeled as "c";

e) On line 1 of claim 30, omit the punctuation after --22-- ".";

f) Claim 31 has two instances of limitations labeled as "c";

g) On line 1 of claim 39, omit the punctuation after --31-- ".".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 6 and 12** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 6 recites the limitation "the hashed code" in line 2. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 12 recites the limitation "the stored association" in lines 13-14. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. **Claims 1-4, 6, 7, 9-14, 17, 19-22, 24-26, 28, 30-35, 37 and 39** are rejected under 35 U.S.C. 102(a) as being anticipated by **Heinonen et al. (U.S. 2003/0112789 A1)**.

Consider **claim 1**, Heinonen et al. clearly show and disclose that during the period when a mobile wireless device, reading on the claimed "wireless device," is within the coverage area of a short range wireless access point,

reading on the claimed "short-range wireless access point," it sends a request for service to be obtained over the Internet from a network server. The short range wireless access point forwards that request over the Internet to the server, augmented with additional information including the network address and geographic location of the access point. The short range wireless access point receives a response message over the Internet from the server, including a global/local parameter. The global/local parameter, reading on the claimed "code for identification purposes in short-range and network communications," will notify the mobile wireless device whether the requested service is available outside the coverage area of the short range wireless access point. The access point forwards the response message to the mobile wireless device, which uses the information in the message to contact the server over the Internet to download web pages or to conduct other server operations. If the user selects to continue the contact with the server, then a stored handover address is accessed. The handover address may be stored in the mobile wireless device or alternately, it may be stored in the short range wireless access point. A cellular telephone connection is made by the mobile wireless device with the regional cellular telephone access point, reading on the claimed "A short-range wireless access point enabling a mobile wireless device to resume service with a network server after the wireless device moves out of the coverage area of the of the access point, comprising: a) a server including transceivers for short-range wireless communication within a coverage area and with a network server; b) a

mobile device coupled to the server via a short-range communication link; c) means registering the mobile device when initiating proximity services with a service provider; d) means transmitting a code to the mobile device for identification purposes in short-range and network communications; e) means initiating a session for the mobile device with the service provider when within the coverage area; and f) means maintaining the session with the service provider when the mobile device moves outside the coverage area," (paragraphs 20, 22).

Consider **claim 2**, and **as applied to claim 1 above**, Heinonen et al. further disclose that if the mobile wireless device detects that it has left the coverage area of the short range wireless access point while in contact with the server, it will determine whether the global/local parameter indicates that the service is global. If the parameter is global, then the mobile wireless device stores a bookmark of the server's URL, for example the URL and path name for one of the prior web pages downloaded from the server. The mobile wireless device displays a notice to the user offering the user the option of continuing the contact with the server over the regional cellular telephone network, reading on the claimed "means for transferring the session to the network server when the mobile device moves outside the coverage area," (paragraph 21).

Consider **claim 3**, and **as applied to claim 1 above**, Heinonen et al. further disclose that when the user's device **100** sends either a paging packet or an inquiry response packet, such as inquiry response packet **510**, to the access point **140**, the access point uses the information in the received packet as stimuli

to be matched with trigger words stored in the trigger word table **260**. For example, the address of the device in field **520** can be matched with address values **266** in the trigger word table. Also, the class of device of the device in field **522** can be compared with class of device values **268** stored in the trigger word table, reading on the claimed "means providing the access point with a first and a second identification of the mobile device," (paragraph 80).

Consider **claim 4**, and **as applied to claim 1 above**, Heinonen et al. further disclose that the short range wireless access point receives a response message over the Internet from the server, including a global/local parameter, reading on the claimed "means coupling the access point to the service provider via an information network," (paragraph 20).

Consider **claim 6**, and **as applied to claim 3 above**, Heinonen et al. further disclose that the Bluetooth access point forwards the response message **435** to the user's Bluetooth device from the server. The Bluetooth packet structure **430** for the user's request includes the access code for the piconet master in the piconet formed by the mobile Bluetooth device and the Bluetooth access point, the header containing the slave device number and the packet type, and the payload portion. The payload portion includes the payload header and the payload data. The mobile wireless device receives the server response message. The mobile wireless device uses the information in the server response message to contact the server over the Internet to download web pages or to conduct other server operations, reading on the claimed "means

transmitting a message to the mobile device including hashed code and instructing the mobile device to forward the message to the server for associating the first identification with the second identification in subsequent request for service by the mobile device,” (paragraph 55).

Consider **claim 7**, and **as applied to claim 1 above**, Heinonen et al. further disclose that the access point forwards the response message to the mobile wireless device, which uses the information in the message to contact the server over the Internet to download web pages or to conduct other server operations. If the mobile wireless device detects that it has left the coverage area of the short range wireless access point while in contact with the server, it will determine whether the global/local parameter indicates that the service is global. If the parameter is global, then the mobile wireless device stores a bookmark of the server's URL, for example the URL and path name for one of the prior web pages downloaded from the server. The mobile wireless device displays a notice to the user offering the user the option of continuing the contact with the server over the regional cellular telephone network, reading on the claimed “a service provider incorporated within the access point; and means enabling the access point to contact the mobile device and provide services via the short-range communication link when the mobile device is within the coverage area or through a cellular network if the mobile device is outside the coverage area,” (paragraphs 20, 21).

Consider **claim 9**, and **as applied to claim 1 above**, Heinonen et al. further disclose that when the mobile wireless device is within the coverage area of the short range wireless access point, it sends a request for service to be obtained, over the Internet **144** from network server **180**. The short range wireless access point is a Bluetooth access point and the short range wireless circuits in the mobile wireless device are Bluetooth circuits, reading on the claimed "short-range communication link implements Bluetooth protocols," (paragraph 50).

Consider **claim 10**, and **as applied to claim 1 above**, Heinonen et al. further disclose that if the user selects to continue the contact with the server, then a stored handover address is accessed. The stored handover address may be a default address or alternately, it may be a handover address included in the prior response message from the server. The handover address will typically be the telephone number of a protocol gateway, such as a WAP gateway, connected between the cellular telephone network and the Internet. A cellular telephone connection is made by the mobile wireless device with the regional cellular telephone access point. Then, a cellular telephone call is placed to the protocol gateway. When the call is completed over the telephone network from the mobile wireless device to the protocol gateway, the mobile wireless device sends a message to the protocol gateway, reading on the claimed "network server implements cellular protocols," (paragraph 22).

Consider **claim 11**, and **as applied to claim 4 above**, Heinonen et al. further disclose that the short range wireless access point receives a response message over the Internet from the server, including a global/local parameter, reading on the claimed "information network is the Internet," (paragraph 20).

Consider **claim 12**, Heinonen et al. clearly show and disclose that a user device receives a paging packet **530** from an access point (AP), reading on the claimed "short-range wireless access point," device. The user device's, reading on the claimed "mobile device," L2CAP layer **220** determines if the class of device (CoD) field **542** in the paging packet indicates that the next packet is an Access Point Service Indication (APSI) message **550**. If it is, then when the user's device receives the next packet(s) from the AP, the L2CAP layer loads it into an APSI message buffer. The L2CAP layer verifies that packet header indicates an APSI message from the AP. The user selectively enters an input to the GUI **234** to establish a connection with the AP, reading on the claimed "method in a short-range wireless access point for enabling a mobile device to resume service with a network server, the service having been interrupted by moving the mobile device out of the coverage area of the access point, comprising; establishing a short-range communication link for initiating a service with the mobile wireless device, wherein the short-range communication link is based on a local area identification the mobile wireless device," for a session with the service platform server **180**, reading on the claimed "network server." The user device and the AP then open an SDP and/or a non-SDP channel and they

begin a session. The AP registers the user's device with the service platform server and requests service for the user's device. Then, the user's device and the service platform server conduct a session via the AP, reading on the claimed "requesting from the mobile wireless device an additional identification through the short-range communication link, wherein the requested identification relates to a wide area network identification of the terminal; receiving the additional identification from the mobile wireless device; determining whether the service with the mobile wireless device through the short-range communication link is open," (paragraphs 85-93). If the mobile wireless device detects that it has left the coverage area of the short range wireless access point while in contact with the server, it will determine whether a global/local parameter indicates that the service is global. If the parameter is global, then the mobile wireless device may store a bookmark of the server's URL. The mobile wireless device displays a notice on browser **102** to the user, offering the user the option of continuing the contact with the server over the regional cellular telephone network. If the user selects to continue the contact with the server **180**, then a stored handover address **582** is accessed. The handover address **582** may be stored in the mobile wireless device. The handover address will typically be the telephone number of a protocol gateway **118**, such as a WAP gateway, connected between the cellular telephone network **116** and the Internet **144**. A cellular telephone connection is made by the mobile wireless device **100** with the regional cellular telephone access point. Then, a cellular telephone call is placed to the protocol

gateway. When the call is completed over the telephone network from the mobile wireless device to the protocol gateway, the mobile wireless device sends a message to the protocol gateway, which it forwards to the server. Depending on the request, the server responds by resuming the operations it had previously been conducting in its prior contact with the mobile wireless device, reading on the claimed "establishing wide area connection with the mobile wireless device using the stored association in response to detecting that the short-range communication link is closed," (paragraph 94).

Consider **claim 13**, and **as applied to claim 12 above**, Heinonen et al. further disclose that when the user's device **100** sends either a paging packet or an inquiry response packet, such as inquiry response packet **510**, to the access point **140**, the access point uses the information in the received packet as stimuli to be matched with trigger words stored in the trigger word table **260**. For example, the address of the device in field **520** can be matched with address values **266** in the trigger word table. Also, the class of device of the device in field **522** can be compared with class of device values **268** stored in the trigger word table, reading on the claimed "providing the access point with a first and a second identification of the mobile device," (paragraph 80).

Consider **claim 14**, and **as applied to claim 12 above**, Heinonen et al. further disclose that the short range wireless access point receives a response message over the Internet from the server, including a global/local parameter,

reading on the claimed "coupling the access point to the service provider via an information network," (paragraph 20).

Consider **claim 17**, and **as applied to claim 12 above**, Heinonen et al. further disclose that the access point forwards the response message to the mobile wireless device, which uses the information in the message to contact the server over the Internet to download web pages or to conduct other server operations. If the mobile wireless device detects that it has left the coverage area of the short range wireless access point while in contact with the server, it will determine whether the global/local parameter indicates that the service is global. If the parameter is global, then the mobile wireless device stores a bookmark of the server's URL, for example the URL and path name for one of the prior web pages downloaded from the server. The mobile wireless device displays a notice to the user offering the user the option of continuing the contact with the server over the regional cellular telephone network, reading on the claimed "incorporating a service provider within the access point; and enabling the access point to contact the mobile device and provide services via the short-range communication link when the mobile device is within the coverage area or through a cellular network if the mobile device is outside the coverage area," (paragraphs 20, 21).

Consider **claim 19**, and **as applied to claim 12 above**, Heinonen et al. further disclose that when the mobile wireless device is within the coverage area of the short range wireless access point, it sends a request for service to be

obtained, over the Internet **144** from network server **180**. The short range wireless access point is a Bluetooth access point and the short range wireless circuits in the mobile wireless device are Bluetooth circuits, reading on the claimed "short-range communication link implements Bluetooth protocols," (paragraph 50).

Consider **claim 20**, and **as applied to claim 12 above**, Heinonen et al. further disclose that if the user selects to continue the contact with the server, then a stored handover address is accessed. The stored handover address may be a default address or alternately, it may be a handover address included in the prior response message from the server. The handover address will typically be the telephone number of a protocol gateway, such as a WAP gateway, connected between the cellular telephone network and the Internet. A cellular telephone connection is made by the mobile wireless device with the regional cellular telephone access point. Then, a cellular telephone call is placed to the protocol gateway. When the call is completed over the telephone network from the mobile wireless device to the protocol gateway, the mobile wireless device sends a message to the protocol gateway, reading on the claimed "network server implements cellular protocols in establishing a wide area connection," (paragraph 22).

Consider **claim 21**, and **as applied to claim 14 above**, Heinonen et al. further disclose that the short range wireless access point receives a response

message over the Internet from the server, including a global/local parameter, reading on the claimed "information network is the Internet," (paragraph 20).

Consider **claims 22 and 31**, Heinonen et al. clearly show and disclose that during the period when a mobile wireless device, reading on the claimed "wireless device," is within the coverage area of a short range wireless access point, reading on the claimed "hotspot server," it sends a request for service to be obtained over the Internet from a network server. The short range wireless access point forwards that request over the Internet to the server, augmented with additional information including the network address and geographic location of the access point. The short range wireless access point receives a response message over the Internet from the server, including a global/local parameter. The global/local parameter, reading on the claimed "code for identification purposes in short-range and network communications," will notify the mobile wireless device whether the requested service is available outside the coverage area of the short range wireless access point. The access point forwards the response message to the mobile wireless device, which uses the information in the message to contact the server over the Internet to download web pages or to conduct other server operations. If the user selects to continue the contact with the server, then a stored handover address is accessed. The handover address may be stored in the mobile wireless device or alternately, it may be stored in the short range wireless access point. A cellular telephone connection is made by the mobile wireless device with the regional cellular telephone access point,

reading on the claimed "A system enabling a mobile wireless device to resume service with a network server after the wireless device moves out of a coverage area of an access point, comprising: a) a hotspot server including transceivers for short-range wireless communication within a coverage area and with a network server; b) a mobile device including means for short-range communication and network communications; c) means coupling the hotspot server to a service provider; c) means stored in the mobile device for implementing short-range communications with the hotspot server when within the coverage area; d) means stored in the hotspot server for recognizing the mobile device when initiating short-range communication with the mobile device e) means registering the mobile device when initiating proximity services with the service provider; f) means transmitting a code to the mobile device for identification purposes in short-range and network communications; g) means initiating a session for the mobile device with the service provider within the coverage area; and h) means maintaining the session with the service provider using the code when the mobile device moves outside the coverage area," (paragraphs 20, 22).

Consider **claims 24 and 33**, and **as applied to claims 22 and 31 above**, respectively, Heinonen et al. further disclose that the user selectively enters an input to the GUI to establish a connection with the AP for a session with the service platform server, reading on the claimed "backend server." The user device and the AP then open an SDP and/or a non-SDP channel and they begin a session. The AP registers the user's device with the service platform server

and requests service for the user's device. Then, the user's device and the service platform server conduct a session via the AP, reading on the claimed "hotspot server is coupled to a backend server," (paragraphs 91-93).

Consider **claims 25 and 34**, and **as applied to claims 22 and 25 above**, respectively, Heinonen et al. further disclose that during an initial period when the mobile wireless device is within the coverage area of the short range wireless access point, it sends a request for service to be obtained, for example, over the Internet from network server. The Bluetooth access point forwards the user's service request in an augmented service request message to the server 180. The service request from the user's device is forwarded by the access point in the augmented service request message, over, for example, the LAN **142** and the Internet **144** to the content server, reading on the claimed "service provider is incorporated within the hotspot server and the server selects a first communication protocol to link with the mobile device when the mobile device is within the coverage area and a second communication protocol as a smooth handover when the mobile device leaves the coverage area," (paragraph 50, 52).

Consider **claims 26 and 35**, and **as applied to claims 22 and 35 above**, respectively, Heinonen et al. further disclose that if the mobile wireless device detects that it has left the coverage area of the short range wireless access point while in contact with the server, it will determine whether a global/local parameter indicates that the service is global. If the parameter is global, then the mobile wireless device may store a bookmark of the server's URL. The mobile wireless

device displays a notice on browser to the user, offering the user the option of continuing the contact with the server over the regional cellular telephone network. If the user selects to continue the contact with the server 180, then a stored handover address is accessed. The handover address 582 may be stored in the mobile wireless device. The handover address will typically be the telephone number of a protocol gateway, such as a WAP gateway, connected between the cellular telephone network and the Internet. A cellular telephone connection is made by the mobile wireless device with the regional cellular telephone access point. Then, a cellular telephone call is placed to the protocol gateway. When the call is completed over the telephone network from the mobile wireless device to the protocol gateway, the mobile wireless device sends a message to the protocol gateway, which it forwards to the server. Depending on the request, the server responds by resuming the operations it had previously been conducting in its prior contact with the mobile wireless device, reading on the claimed "provider continues a consumer relation with the mobile device while out of the coverage area using the cellular address number of the device," (paragraph 94).

Consider **claims 28 and 37**, and **as applied to claims 22 and 31 above**, respectively, Heinonen et al. further disclose that the AP registers the user's device with the service platform server and requests service for the user's device. Then, the user's device and the service platform server conduct a session via the AP. The service platform server can then download the maps, advertising and/or

other service offerings to the mobile Bluetooth device, reading on the claimed "service provider provides tailored services to a mobile device," (paragraph 93).

Consider **claims 30 and 39**, and **as applied to claims 22 and 31 above**, respectively, Heinonen et al. further disclose that the server responds by resuming the operations it had previously been conducting in its prior contact with the mobile wireless device. For example, WML, HTML, or graphics files can be returned by the server to the WAP gateway. For example, the server can respond to a GET method request by sending the requested web page to the protocol gateway. Alternately, the server can respond by executing CGI, ASP, or JSP scripts or other server programs to dynamically generate WML or HTML content to be returned to the WAP gateway. The protocol gateway then performs an HTML to WML conversion of the content, followed by WML encoding to form the WSP response message. The WSP response message is then transmitted by the WAP gateway over the telephone network to the cellular telephone access device. The cellular telephone access device then transmits the WSP response message containing the content, over the cellular telephone air link to the mobile wireless device, reading on the claimed "service provider services are browser/J2ME based," (paragraph 24).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. **Claims 5, 8, 15, 18, 23 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heinonen et al. (U.S. 2003/0112789 A1)** in view of **Rockwell (U.S. 2004/011699 A1)**.

Consider **claim 5**, and **applied to claim 3 above**, Heinonen et al. clearly show and disclose the claimed invention except that first and second identifications are coupled into a hashed code.

In the same field of endeavor, Rockwell clearly shows and discloses A platform allowing automated device service subscription by remote devices employs a provisioning scheme to regulate subscriptions and supplies replenishment (abstract). The CS Platform can be configured in multiple ways for network connectivity, including use of a fixed IP address and use of DHCP to acquire an IP address. A fixed address is preferred for most users and has the advantage of making it easy to point a browser to the CS Platform UI when ready. DHCP is a very easy to install alternative, but would require a device domain name for the CS Platform and DNS services connection. One possible way to provide an automatic domain name is to combine the IOT serial number with the last two digits of the MAC address, reading on the claimed "means coupling the first and second identifications in a hashed code as proximity identification of the mobile device," (paragraph 194).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the serial number and MAC address to create a unique domain name as taught by Rockwell in the system of Heinonen et al., in order to provide service from a network server.

Consider **claim 8**, and **applied to claim 3 above**, Heinonen et al. clearly show and disclose the claimed invention except that the identifications are a MAC address and a serial number.

In the same field of endeavor, Rockwell clearly shows and discloses A platform allowing automated device service subscription by remote devices employs a provisioning scheme to regulate subscriptions and supplies replenishment (abstract). The CS Platform can be configured in multiple ways for network connectivity, including use of a fixed IP address and use of DHCP to acquire an IP address. A fixed address is preferred for most users and has the advantage of making it easy to point a browser to the CS Platform UI when ready. DHCP is a very easy to install alternative, but would require a device domain name for the CS Platform and DNS services connection. One possible way to provide an automatic domain name is to combine the IOT serial number with the last two digits of the MAC address, reading on the claimed "the first identification is a MAC address and the second identification is a machine number for the mobile device," (paragraph 194).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the serial number and MAC

address to create a unique domain name as taught by Rockwell in the system of Heinonen et al., in order to provide service from a network server.

Consider **claim 15**, and **applied to claim 12 above**, Heinonen et al. clearly show and disclose the claimed invention except that first and second identifications are coupled into a hashed code.

In the same field of endeavor, Rockwell clearly shows and discloses A platform allowing automated device service subscription by remote devices employs a provisioning scheme to regulate subscriptions and supplies replenishment (abstract). The CS Platform can be configured in multiple ways for network connectivity, including use of a fixed IP address and use of DHCP to acquire an IP address. A fixed address is preferred for most users and has the advantage of making it easy to point a browser to the CS Platform UI when ready. DHCP is a very easy to install alternative, but would require a device domain name for the CS Platform and DNS services connection. One possible way to provide an automatic domain name is to combine the IOT serial number with the last two digits of the MAC address, reading on the claimed "means coupling the first and second identifications in a hashed code as proximity identification of the mobile device," (paragraph 194).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the serial number and MAC address to create a unique domain name as taught by Rockwell in the system of Heinonen et al., in order to provide service from a network server.

Consider **claim 18**, and **applied to claim 13 above**, Heinonen et al. clearly show and disclose the claimed invention except that the identifications are a MAC address and a serial number.

In the same field of endeavor, Rockwell clearly shows and discloses A platform allowing automated device service subscription by remote devices employs a provisioning scheme to regulate subscriptions and supplies replenishment (abstract). The CS Platform can be configured in multiple ways for network connectivity, including use of a fixed IP address and use of DHCP to acquire an IP address. A fixed address is preferred for most users and has the advantage of making it easy to point a browser to the CS Platform UI when ready. DHCP is a very easy to install alternative, but would require a device domain name for the CS Platform and DNS services connection. One possible way to provide an automatic domain name is to combine the IOT serial number with the last two digits of the MAC address, reading on the claimed "the first identification is a MAC address and the second identification is a machine number for the mobile device," (paragraph 194).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the serial number and MAC address to create a unique domain name as taught by Rockwell in the system of Heinonen et al., in order to provide service from a network server.

Consider **claims 23 and 32**, and **as applied to claims 22 and 31 above**, respectively, Heinonen et al. clearly show and disclose the claimed invention except that a MAC address and a cellular address number are coupled together.

In the same field of endeavor, Rockwell clearly shows and discloses A platform allowing automated device service subscription by remote devices employs a provisioning scheme to regulate subscriptions and supplies replenishment (abstract). The CS Platform can be configured in multiple ways for network connectivity, including use of a fixed IP address and use of DHCP to acquire an IP address. A fixed address is preferred for most users and has the advantage of making it easy to point a browser to the CS Platform UI when ready. DHCP is a very easy to install alternative, but would require a device domain name for the CS Platform and DNS services connection. One possible way to provide an automatic domain name is to combine the IOT serial number with the last two digits of the MAC address. Other combinations of readily available information known to the user and the CS Platform by default are possible, reading on the claimed "means coupling a MAC address and a cellular address number of the mobile device in a code as an identifier of a subscriber of proximity services," (paragraph 194).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the serial number and MAC address to create a unique domain name as taught by Rockwell in the system of Heinonen et al., in order to provide service from a network server.

14. **Claims 27 and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heinonen et al. (U.S. 2003/0112789 A1)** in view of **Bjorklund et al. (U.S. 2003/0046184)**.

Consider **claims 27 and 36**, and **as applied to claims 22 and 31 above**, respectively, Heinonen et al. clearly show and disclose the claimed invention except that the network server provides SMS/MMS based service.

In the same field of endeavor, Bjorklund et al. clearly show and disclose a digital pen that communicates with an application service provider to perform a desired function. The digital pen **104** may be associated with an individual or business end user. End users may utilize the digital pen and digital paper for a variety of purposes. For example, writing from a digital pen on digital paper may be transformed to a facsimile message, an electronic mail (e-mail) message, or a short message (e.g., SMS-short message service). The pen may be hard wired, provided with infrared base communication technology or may communicate to a communication channel for eventual transfer to the desired destination via a pen-communication channel connection **112** which may desirably employ wireless data transmission utilizing the Bluetooth communication protocol. The digital pen communicates information via a Bluetooth encoded wireless transmission, to a Bluetooth enabled wireless telephone or PDA (personal digital assistant) which may save the data and then, in turn, transmit the data to a personal computer connected to a communications network such as the internet, (paragraphs 32,

33). A technological service provider **120** verifies that the pen user is an authorized user with a current account and then sends the pen of the pen user the address of the application service provider **200**, in this case an SMS server, reading on the claimed "services provider services are SMS/MMS based," (paragraph 44).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an end-user in a Bluetooth environment with SMS services as taught by Bjorklund et al. in the system of Heinonen et al., in order to provide service from a network server.

15. **Claims 29 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heinonen et al. (U.S. 2003/0112789 A1)** in view of **Belmont (U.S. 2004/0127204)**.

Consider **claims 29 and 38**, and as applied to **claims 22 and 31** above, respectively, Heinonen et al. clearly show and disclose the claimed invention except that the billing data is sent to the mobile device in a SMS message.

In the same field of endeavor, Belmont clearly shows and discloses that a user of MU **100** sends a SMS/MMS "connect me" message to the cell phone whose number is shown on the display at public AP **300**. The message may be received by public AP configuration server **310**, and in response, configuration server may begin to exchange configuration information with MU by sending SMS/MMS messages. The public AP may send SMS/MMS messages or may

use a secured LAN connection to the cellular operator to provide the costs, billing information and terms of a required WLAN service (step 640), reading on the claimed "access point tracks and calculates services used by a mobile device within a billing zone and sends the billing data to the mobile device in a SMS message," (fig. 3, paragraphs 31, 34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to send billing information to a mobile unit via SMS as taught by Belmont in the system of Heinonen et al., in order to provide service from a network server.

Allowable Subject Matter

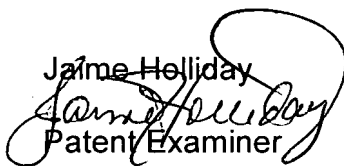
16. **Claim 16** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime M. Holliday whose telephone number is (571) 272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaime Holliday

Patent Examiner


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER